

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

Amtech Systems, LLC,

Plaintiff,

v.

Kapsch TrafficCom AG; Kapsch TrafficCom B.V.; Kapsch TrafficCom Holding Corp.; Kapsch TrafficCom Holding II US Corp.; Kapsch TrafficCom Inc.; Kapsch TrafficCom Services USA, Inc.; Kapsch TrafficCom USA, Inc.; Kapsch TrafficCom IVHS, Inc.; and Kapsch TrafficCom Canada, Inc.,

Defendants.

CIV. A. NO. 20-CV-1200

JURY TRIAL DEMANDED

COMPLAINT FOR INFRINGEMENT OF U.S. PATENT NO. 8,237,565

1. On November 12, 2020, Plaintiff Amtech Systems, LLC filed a patent infringement action in this District against the same Defendants as this action. *See Amtech Systems, LLC v. Kapsch TrafficCom AG et al.*, No. 20-CV-1044 (W.D. Tex. filed Nov. 12, 2020). Plaintiff subsequently discovered a scrivener's error in the recorded assignment for one of the patents asserted in the first action, U.S. Patent No. 8, 237,565. Notwithstanding its belief that the assignment was nevertheless effective, for the avoidance of doubt, Plaintiff recorded a corrective assignment for the patent on December 14, 2020. For the further avoidance of doubt, Plaintiff amended its complaint in the first action on December 30, 2020 to delete any claims with respect to that patent, and hereby refiles those claims.

2. For at least the foregoing reasons, Plaintiff avers that this action should be consolidated with *Amtech Systems, LLC v. Kapsch TrafficCom AG et al.*, No. 20-CV-1044 (W.D. Tex. filed Nov. 12, 2020).

3. Plaintiff Amtech Systems, LLC ("Amtech") is a global leader in traffic management systems. For more than 80 years, it has specialized in developing innovative

transportation solutions that support government agencies and private firms around the world. Its business includes the research, development, manufacturing, sale, and marketing of radio frequency identification (“RFID”) products and services, with an emphasis on toll road applications.

4. A pioneer in RFID technology, Amtech developed the industry’s first transportation applications at Los Alamos National Labs in the 1980s. Today, its RFID systems secure access for tolling facilities, airports, hospitals, parking garages, border patrols, trucking fleets, and the rail industry.

5. Amtech is a wholly-owned subsidiary of TransCore, LP (“TransCore”), and its products and solutions are often marketed and sold under the TransCore name.

6. Electronic toll collection (“ETC”) refers to the technology that allows drivers to proceed along an express lane or other toll road and pay their tolls automatically without having to stop and pay a toll collector. This saves commuters, truck drivers, and others countless hours due to more efficient operations; ensures timely and accurate collections for government agencies and other toll road owners; and citizens also benefit generally from higher government revenue and lower taxes.

7. TransCore designs, installs, and operates ETC systems based on Amtech products and solutions. These include hundreds of express lanes deployed, thousands of electronic toll collection lanes installed, and hundreds of millions of RFID tags sold, capturing billions of toll transactions each year. Amtech also sells its solutions to third party providers of ETC systems. Amtech’s solutions enable the most accurate and advanced toll collection in the marketplace.

8. Amtech has spent hundreds of millions of dollars over the years and countless hours of engineering time to develop the technology powering its ETC solutions.

9. Amtech’s ETC solutions include a variety of products. Among these are tags, also

known as transponders, and readers. Tags can be affixed to an object, such as a vehicle having a tag mounted on its windshield. As the vehicle approaches a toll capture zone, a reader can interrogate or read the tag. Amtech's readers are capable of reading and writing to a variety of transponders using different protocols. Identification received from the tag allows the authority maintaining the toll facility to deduct the amount of the toll from an account associated with the tag. *See, e.g.*, Exhibit A at 1:28-43. Amtech's line of tags includes "active" tags, which are battery powered, and "passive" tags, which are not. It also includes both flexible-circuit based tags (commonly known as "sticker" tags) and hardcase transponders. Each tag/transponder is assigned a unique identifier to ensure proper identification and billing of toll road users.

10. By eliminating the need to stop and pay tolls, Amtech's solutions reduce traffic and increase safety. They also provide critical revenue to customers across the United States.

11. The United States Patent and Trademark Office has granted numerous patents on Amtech's ETC technology, including U.S. Patent No. 8,237,565 (the "'565 Patent") (the "Asserted Patent," attached as Exhibit A).

12. Amtech's ETC patents cover, among other things, RFID transponders, readers, and systems that are adapted for storing, retrieving, tracking, and verifying identification data used on toll roads, as well as related methods and processes. By way of example, the Asserted Patent includes unique intermodulation mitigation techniques that remove interference when multiple readers are placed in close proximity, such as in adjacent lanes of a highway toll capture area. *See, e.g.*, Exhibit A at Abstract.

13. Amtech generates revenue from the marketing and sale of products incorporating its patented technologies. Amtech has marked its products in accordance with 35 U.S.C. § 287 since at least May 2017.

14. Amtech has made significant investments in the United States devoted to

researching, developing, manufacturing, marketing, selling, testing, and supporting RFID transponders, readers, and system solutions that employ the technology covered by the Asserted Patent. For example, Amtech has its primary manufacturing facility in Albuquerque, New Mexico, where it employs engineers, administrative staff, and manufacturing personnel. Amtech also has a state-of-the-art test track facility in Albuquerque, where its products and solutions undergo rigorous testing. This facility employs both test technicians and drivers.

15. Defendant Kapsch TrafficCom AG and its subsidiaries Kapsch TrafficCom B.V.; Kapsch TrafficCom Holding Corp.; Kapsch TrafficCom Holding II US Corp.; Kapsch TrafficCom Inc.; Kapsch TrafficCom Services USA, Inc.; Kapsch TrafficCom USA, Inc.; Kapsch TrafficCom IVHS, Inc.; and Kapsch TrafficCom Canada, Inc. (collectively, “Kapsch” or the “Kapsch Defendants”) are competitors of Amtech and its parent company TransCore.

16. Kapsch often bids against Amtech and TransCore on ETC projects. For example, in recent years, this includes bids on the North Tarrant Express project in Texas, the Louisville-Southern Indiana Ohio River Bridges Project, and toll roads in Puerto Rico.

17. Kapsch’s products and services incorporate Amtech’s patented technology without any license or authorization. This includes the inventions claimed in the Asserted Patent. Kapsch did not develop this technology but is now and has been using it to unlawfully compete against Amtech and TransCore.

18. By using Amtech’s patented technology, Kapsch has been able to unlawfully compete against Amtech without incurring any of the time and expense of developing that technology. Among other things, this free-riding has enabled Kapsch to underbid Amtech and TransCore to win projects that used or required technology to which it did not have the rights, and to reap profits far in excess of what it could lawfully have earned. For example, on information and belief, Kapsch used the technology claimed in the Asserted Patent to win and to perform at

least each of the Texas, Louisville-Southern Indiana, and Puerto Rico projects discussed above.

19. The ETC market is highly competitive and ETC projects are typically long-term. In many cases, one bidder will be awarded a contract not only for the sale of tags and readers, but also for the design, installation, operation, and maintenance of the entire ETC solution. Among other things, Kapsch's use of Amtech's patented technology allowed it to unjustly win bids at Amtech's expense. As a result, Kapsch earned far more than it would have, not only on the unlawful sales and use of tags and readers, but also on design, installation, operation, and maintenance fees, in some cases stretching on for many years, as these additional services were included in the bid as a bundle with the tags and readers. The underlying technology—including the tags and readers—enables the overall system to perform; thus, it was Kapsch's infringement of Amtech's patents that allowed it to unfairly win these bids.

20. Kapsch's illicit gains have come at Amtech's expense, leaving Amtech no choice but to file this lawsuit to defend its intellectual property rights.

THE PARTIES

21. Plaintiff Amtech Systems, LLC is a Delaware limited liability company with a principal place of business at 8600 Jefferson Street, NE, Albuquerque, NM 87113-1629.

22. Amtech is also the owner of all right, title, and interest in and to the Asserted Patent.

23. On information and belief, defendant Kapsch TrafficCom AG is an Austrian corporation with a principal place of business at Am Europlatz 2, 1120 Vienna, Austria.

24. On information and belief, defendant Kapsch TrafficCom B.V. is a Netherlands corporation with a principal place of business at Verlengde Poolseweg 14, Breda, Noord-Brabant, 4818 CL, Netherlands.

25. On information and belief, defendant Kapsch TrafficCom Holding Corp. is a Delaware corporation with a principal place of business at 8201 Greensboro Drive, Suite 1002,

McLean, VA 22102-3840.

26. On information and belief, defendant Kapsch TrafficCom Holding II US Corp. is also a Delaware corporation with a principal place of business at 8201 Greensboro Drive, Suite 1002, McLean, VA 22102-3840.

27. On information and belief, defendant Kapsch TrafficCom Inc. is also a Delaware corporation with a principal place of business at 8201 Greensboro Drive, Suite 1002, McLean, VA 22102-3840.

28. On information and belief, defendant Kapsch TrafficCom Services USA, Inc. is also a Delaware corporation with a principal place of business at 8201 Greensboro Drive, Suite 1002, McLean, VA 22102-3840.

29. On information and belief, defendant Kapsch TrafficCom USA, Inc. is also a Delaware corporation with a principal place of business at 8201 Greensboro Drive, Suite 1002, McLean, VA 22102-3840.

30. On information and belief, defendant Kapsch TrafficCom IVHS, Inc. is also a Delaware corporation with a principal place of business at 8201 Greensboro Drive, Suite 1002, McLean, VA 22102-3840.

31. On information and belief, defendant Kapsch TrafficCom Canada, Inc. is a Canada corporation with a principal place of business at Ambler Drive, Mississauga, ON L4W 2P1, Canada.

JURISDICTION AND VENUE

32. This is an action for patent infringement arising under the patent laws of the United States, 35 U.S.C. § 1 et seq. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).

33. Personal jurisdiction exists over each Kapsch Defendant because, on information

and belief, it has sufficient minimum contacts with the forum as a result of business conducted within the State of Texas and within the Western District of Texas, as described below.

34. Personal jurisdiction also exists specifically over each Kapsch Defendant because, on information and belief, each Kapsch Defendant directly or through subsidiaries or intermediaries, makes, uses, offers for sale, sells, imports, advertises, makes available and/or markets products and services, within the State of Texas and within the Western District of Texas, that infringe the Asserted Patent, as described below.

35. Personal jurisdiction also exists specifically over each Kapsch Defendant because, on information and belief, it directly or through subsidiaries or intermediaries, has purposefully and voluntarily placed one or more infringing products and/or services, as described below, into the stream of commerce with the expectation that they will be purchased and/or used in the State of Texas and in the Western District of Texas. These infringing products and/or services have been, and continue to be, purchased and/or used in the State of Texas and in the Western District of Texas.

36. Venue is proper in this District under 28 U.S.C. § 1400(b) because, on information and belief, each Kapsch Defendant has committed acts of infringement in the Western District of Texas and has a regular and established place of business therein. On information and belief, such acts include, by way of example, infringing acts committed in the course of Kapsch's providing toll and intelligent transportation system products and services for the State Highway 45 Southwest Project in Travis County, Texas and Hays County, Texas. On information and belief, Kapsch also has a regular and established office at 7701 Metropolis Drive, Building 14, Suite 100, Austin, TX 78744-3143.

37. Venue is also proper in this District under 28 U.S.C. § 1391(c)(3) because Kapsch TrafficCom AG, Kapsch TrafficCom B.V., and Kapsch TrafficCom Canada, Inc. are foreign

corporations. *See In re HTC Corp.*, 889 F.3d 1349 (Fed. Cir. 2018).

38. In addition, on information and belief, the Kapsch corporate family (i) has at least one office in this District, (ii) has operations in this District, and/or (iii) sells and/or attempts to sell products and services to customers in this District.

AMTECH'S PATENTED TECHNOLOGY

39. The Kapsch Defendants infringe at least independent claims 1, 4, and 6 and dependent claims 2, 3, 5, and 7 of the '565 Patent (collectively referred to as the "Asserted Claims").

Asserted Patent	Independent Claims	Dependent Claims
8,237,565	1, 4, 6	2, 3, 5, 7

40. The Asserted Patent is directed to RFID systems and generally discloses and claims devices and systems for mitigating downlink interference in transponders by including a frequency-selective filter in the tag. The technology claimed in the Asserted Patent involves, *inter alia*, using a frequency selective filter (*e.g.*, low-pass filter) that filters out the intermodulation effects of frequencies close to the operating frequency and thereby reduces interference. For example, in a typical RFID system (such as highway tolling), readers or interrogators transmit interrogation signals at radio frequencies to transponders or tags. The tags use a detector to detect one or more of the interrogation signals and respond to the interrogator by transmitting a responsive signal. However, the interrogation signals detected by the tags may be corrupted as a result of inter-modulation interference between the desired interrogation signals and an interfering interrogation signal from one of the other readers. The Asserted Patent provides a filter (*e.g.*, a low pass filter) to mitigate the intermodulation effects of the signals from other readers.

41. The '565 Patent has three independent claims and four dependent claims. At least independent claims 1, 4, and 6 and dependent claims 2, 3, 5, and 7 are directly and/or indirectly

infringed by the Kapsch Defendants as discussed below. Independent claim 1 recites:

A transponder for receiving an interrogation signal from a first reader at a first frequency and sending a response signal from the transponder at a third frequency, while mitigating interference effects from interfering signals from a plurality of second readers at least one second frequency, the transponder comprising:

an antenna for receiving the interrogation signal from the first reader and the interfering signals from the plurality of second readers;

a detector in communication with the antenna, said detector detecting the interrogation signal and outputting a baseband analog signal representing the interrogation signal;

a frequency-selective filter that reduces interference from the plurality of second readers and outputs an analog signal having a desired modulation; and

a signal processor in communication with the frequency selective filter to receive the analog signal, said signal processor processing the analog signal to extract information from the analog signal.

Independent claim 4 recites:

A transponder for receiving an interrogation signal from a first reader at a first frequency and sending a response signal from the transponder at the first frequency, while mitigating interference effects from interfering signals from a plurality of second readers at at least one second frequency, the transponder comprising:

an antenna for receiving the interrogation signal from the first reader and the interfering signals from the plurality of second readers;

a detector in communication with the antenna, said detector detecting the interrogation signal and the interfering signals and outputting a baseband analog signal representing the interrogation signal, the interfering signals, and a combination of the interrogation signal and the interfering signals;

a frequency-selective filter that receives the baseband analog signal output by the detector, reduces interference from the plurality of second readers and outputs an analog signal; and

a signal processor in communication with the frequency-selective filter to receive the analog signal output by the frequency-selective filter, said signal processor processing the analog signal output by the frequency-selective filter to extract information from the analog signal output by the frequency-selective filter.

Independent claim 6 recites:

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A transponder for receiving an interrogation signal from a first reader at a first frequency and sending a response signal from the transponder at a third frequency, while mitigating interference effects from interfering signals from a plurality of second readers at at least one second frequency, the transponder comprising:

an antenna for receiving the interrogation signal from the first reader and the interfering signals from the plurality of second readers;

a detector in communication with the antenna, said detector detecting the interrogation signal and the interfering signals and outputting a baseband analog signal representing the interrogation signal, the interfering signal, and a combination of the interrogation signal and the interfering signals;

a frequency-selective filter filtering the baseband analog signal to output an analog signal, wherein the interfering signals are reduced; and

a signal processor in communication with the frequency-selective filter to receive the analog signal output by the frequency-selective filter, said signal processor processing the analog signal with the reduced interference to extract information from the analog signal output by the frequency-selective filter.

KAPSCH'S INFRINGEMENT OF THE ASSERTED PATENT

42. Based on information discovered through Amtech's investigation to date, at least the following products infringe one or more claims of the Asserted Patent, as discussed in more detail below:

- Transponders: any transponders that (a) are compliant with EPC™ Class1 Gen2 and/or ISO 18000-63 air interface protocol standard, and/or (b) include an Alien Higgs 3 ASIC, NXP G2 IM+ ASIC, and/or an ASIC with similar functionality (collectively, the "Accused Transponders"). On information and belief, these Accused Transponders include at least the following products: TRP-8611 UHF RFID Passive Headlamp Tag; TRP-8610 UHF Passive Windshield Tag; SOLANA vehicle transponder; VEKTA windshield transponder; VENUS windshield transponder; ARIES RFID headlamp transponder; PULSAR vehicle transponder; GATRIA RFID hang tag; APOLLO multi-mode tag; GEMINI multi-mode tag;

ASTRIA RFID vehicle registration sticker / 3rd license plate tag; VENUS-DNA vehicle transponder; and ZERO-G cling windshield tag.

43. Each Kapsch Defendant has had constructive notice of the Asserted Patent since at least as early as May 2017 due to Amtech's marking of its products.

44. On information and belief, each Kapsch Defendant also has had actual notice of the Asserted Patent since at least as early as May 2017, due to at least Amtech's marking of its products.

45. On information and belief, each Kapsch Defendant knew that it infringed the Asserted Patent based on its knowledge of the same. Alternatively or additionally, each Kapsch Defendant was willfully blind to the fact that it infringed the Asserted Patent despite its knowledge of the same, based on, for example, the similarity of the Accused Products to Amtech's products. Alternatively or additionally, each Kapsch Defendant has been aware of the Asserted Patent and Amtech's allegations regarding the same since at least as early as the filing of *Amtech Systems, LLC v. Kapsch TrafficCom AG et al.*, No. 20-CV-1044 (W.D. Tex. filed Nov. 12, 2020).

The '565 Patent

46. Kapsch infringes the '565 Patent in at least the following exemplary ways. Details regarding this infringement are found in the claim chart attached as Exhibit B, which is hereby incorporated by reference.

47. On information and belief, each Kapsch Defendant has directly infringed and continues to directly infringe at least claims 1-7 by making, using, offering for sale, selling, importing, advertising, making available and/or marketing the Accused Transponders, which embody these claims, in the United States.

48. On information and belief, each Kapsch Defendant has contributorily infringed and continues to contributorily infringe at least at least claims 1-7 when it offers to sell, sells, and/or

imports the Accused Transponders in the United States, knowing as discussed that they are especially made or especially adapted for use in infringing the claims, and which are not staple articles or commodities of commerce suitable for substantial non-infringing use (e.g., because they embody claims 1-7 of the '565 Patent).

49. On information and belief, the Kapsch Defendants, individually and collectively, have induced and continue to induce infringement of at least claims 1-7 by actively encouraging, with intent to do the same, one or more other Kapsch Defendant(s) or third part(ies) (e.g., related entities, system integrators, business partners, government agencies, customers or others (including users of the Accused Transponders)), to perform one or more of the acts described in paragraph 47 *supra*, knowing that these acts constitute infringement of the claims, and the encouragement results in one or more other Kapsch Defendant(s) or third part(ies) performing one or more of the acts of infringement. For example, the Kapsch Defendants instruct such entities in using the Accused Transponders, which use infringes.

50. On information and belief, the Kapsch Defendants engaged in each of the foregoing acts in the course of the Ohio River Bridges Project. For example, Kapsch induced the Ohio River Bridges Project Joint Board to infringe in the manner discussed.

COUNT I: KAPSCH'S INFRINGEMENT OF THE '565 PATENT

51. Amtech realleges and incorporates by reference paragraphs 1-50 above, as if fully set forth herein.

52. The '565 Patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code.

53. By making, using, offering for sale, selling, importing, advertising, making available and/or marketing infringing products and services, Kapsch infringed, contributorily infringed, and induced infringement of, and will continue to infringe, contributorily infringe, and

induce infringement, literally and/or under the doctrine of equivalents, of at least claims 1-7 of the '565 Patent under one or more of 35 U.S.C. § 271(a), (b), (c), and (f).

54. As stated above, each Kapsch Defendant has had constructive and actual notice of the Asserted Patent since at least as early as May 2017 due to Amtech's marking of its products. In addition, each Kapsch Defendant knew and/or was willfully blind to the fact that it infringed the Asserted Patent based on its knowledge of the same and, for example, the similarity of the Accused Products to Amtech's products. Alternatively or additionally, each Kapsch Defendant has been aware of the Asserted Patent and Amtech's allegations regarding the same since at least as early as the filing of *Amtech Systems, LLC v. Kapsch TrafficCom AG et al.*, No. 20-CV-1122 (W.D. Tex. filed Nov. 12, 2020). Despite Kapsch's notice and awareness of the '565 Patent and/or Amtech's allegations regarding the same, it has infringed, and continues to infringe, the '565 Patent. Kapsch's infringement is therefore willful.

55. As a direct and proximate consequence of the acts and practices of Kapsch in infringing one or more claims of the '565 Patent, Amtech has been, is being, and, unless such acts and practices are enjoined by the Court, will continue to be injured in its business and property rights.

56. As a direct and proximate consequence of the acts and practices of Kapsch in infringing one or more claims of the '565 Patent, Amtech has suffered, is suffering, and unless such acts and practices are enjoined by the Court, will continue to suffer injury and damages, for which it is entitled to relief under 35 U.S.C. § 284 in an amount to be determined at trial.

57. By reason of the acts and practices of Kapsch as described herein, it has also caused, is causing, and, unless such acts and practices are enjoined by the Court, will continue to cause immediate and irreparable harm to Amtech for which there is no adequate remedy at law and for which Amtech is entitled to injunctive relief under 35 U.S.C. § 283.

PRAYER FOR RELIEF

WHEREFORE, Amtech prays for the entry of a judgment from this Court:

- (a) Declaring that Kapsch has directly infringed, contributorily infringed, and induced infringement of the Asserted Patent under 35 U.S.C. § 271 *et al.*;
- (b) Awarding Amtech damages for Kapsch's infringement of the Asserted Patent, together with interest;
- (c) Declaring that Kapsch's infringement of the Asserted Patent has been and is willful;
- (d) Awarding Amtech multiple damages including treble damages under 35 U.S.C. § 284 for willful infringement of the Asserted Patent;
- (e) Declaring this to be an "exceptional case" within the meaning of 35 U.S.C. § 285, entitling Amtech to an award of its reasonable attorney fees, expenses and costs in this action;
- (f) Preliminarily and permanently enjoining Kapsch from further infringement of the Asserted Patent; and
- (g) Awarding Amtech such other and further relief as this Court may deem to be just and proper.

JURY TRIAL DEMAND

Amtech demands a trial by jury on all issues so triable.

DATED: December 30, 2020

Respectfully submitted,

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** pro hac vice to be filed*